

A large, high-contrast photograph of a mallard duck splashing in water, with many water droplets frozen in mid-air around the duck. The duck is facing right, with its head turned slightly back.

# Virginia Department of Game and Inland Fisheries

SECURING A LEGACY OF HABITAT CONSERVATION IN QUEBEC

## Your Annual Conservation Report

APRIL 2019 — MARCH 2020 CONSERVATION REPORT

Submitted by **Ducks Unlimited Canada** and **Ducks Unlimited Inc.**

# Overview

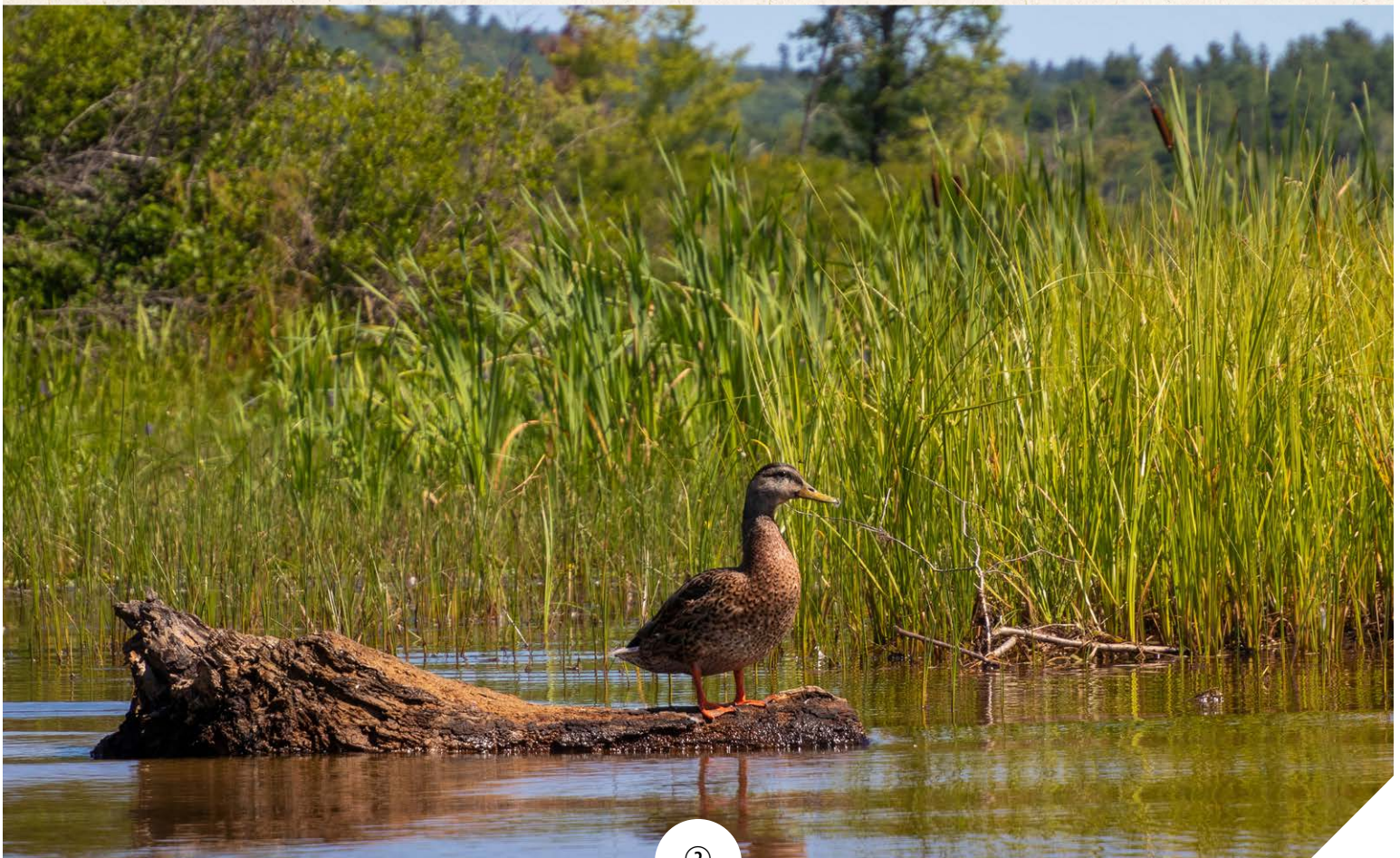
***Ducks Unlimited (DU) is the world leader in wetland conservation.***

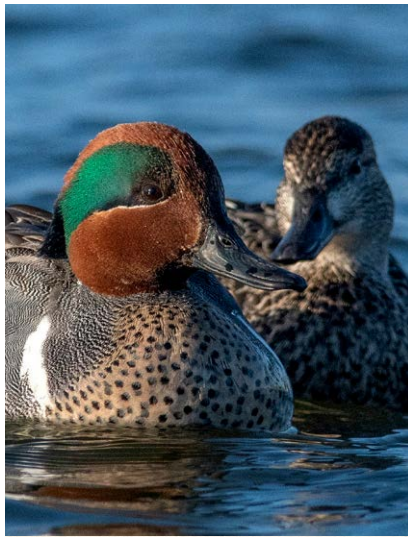
Since 1937, DU has invested over two billion dollars in waterfowl and wildlife habitat conservation in the United States, Canada and Mexico. In Canada alone, DU has completed over 12,000 habitat projects, securing 6.5 million acres, of which 3 million acres have been restored, and positively influencing 190 million acres of habitat that benefit waterfowl, wildlife and people. Besides waterfowl, numerous species of wildlife, including many threatened or endangered species live and flourish on DU projects.



The Association of Fish and Wildlife Agencies (AFWA) recently approved a new name and brand for the international U.S. state partnership supporting Canadian Waterfowl breeding grounds conservation. The program is now under the banner of **Fall Flights!** The AFWA established a goal for states to collectively contribute \$10 million per year to North American Waterfowl Management Plan (NAWMP) projects on the Canadian breeding grounds through the Fall Flights initiative. Fall Flights funding provides non-federal monies that are matched by DU and in turn, matched by federal funds through the North American Wetland Conservation Act (NAWCA).

***In support of this effort, the Virginia Department of Game and Inland Fisheries (DGIF) has collaborated with DU to provide \$415,000 over five years, beginning in 2017, in support of the Quebec Waterfowl Habitat Initiative. This annual report describes progress for the third year of the initiative.***





# Waterfowl Conservation Effort

The St. Lawrence River is a dominant feature of Quebec's landscape. The St. Lawrence Lowlands are a Level 1 priority within DU's International Conservation Plan. Conservation efforts are focused on the St. Lawrence Lowlands, as it is the most densely-populated part of the province, and remains subject to multiple threats including habitat loss, fragmentation and increased urbanization.

Northward, the boreal forest covers 463,000 square miles of Quebec and is part of the largest forested region in the world. More than three million waterfowl breed, stage, or winter in this area. It offers fantastic opportunities for sport hunting and birdwatching along migration routes and wintering areas that stretch from the Arctic to the southern United States.

Waterfowl banding data (*see map below*) from Quebec-banded birds have historically shown a correlation to waterfowl band recoveries from Virginia hunters. Species of waterfowl such as American black duck, mallard, wood duck, green-winged teal, Canada goose, greater snow goose, and greater and lesser scaup are produced in Québec wetlands. For example, 62 per cent of the continental population of American black duck breed in Quebec, and are highly dependent upon the conservation of breeding and staging habitats in the province. Among dabbling ducks, Quebec also produces up to 70 per cent of the eastern green-winged teal population.

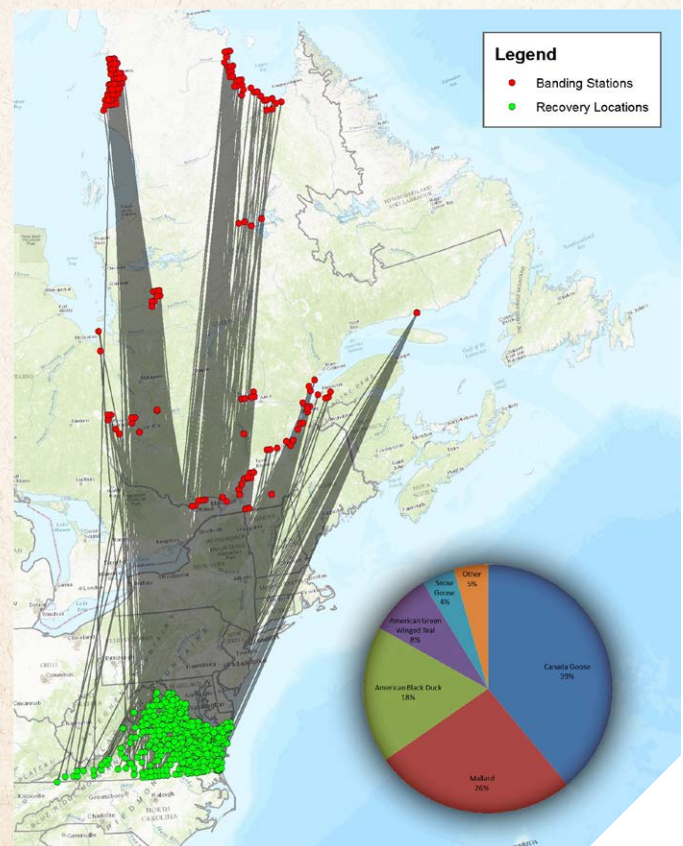
Increasing waterfowl settling rates within our priority areas is the focus of the conservation program mix in Quebec. The enhancement of seasonal and semi-permanent wetlands, where large permanent wetlands exist and currently provide productive habitat for broods, will promote increased waterfowl recruitment rates directly benefiting Virginia's migratory and wintering waterfowl population.

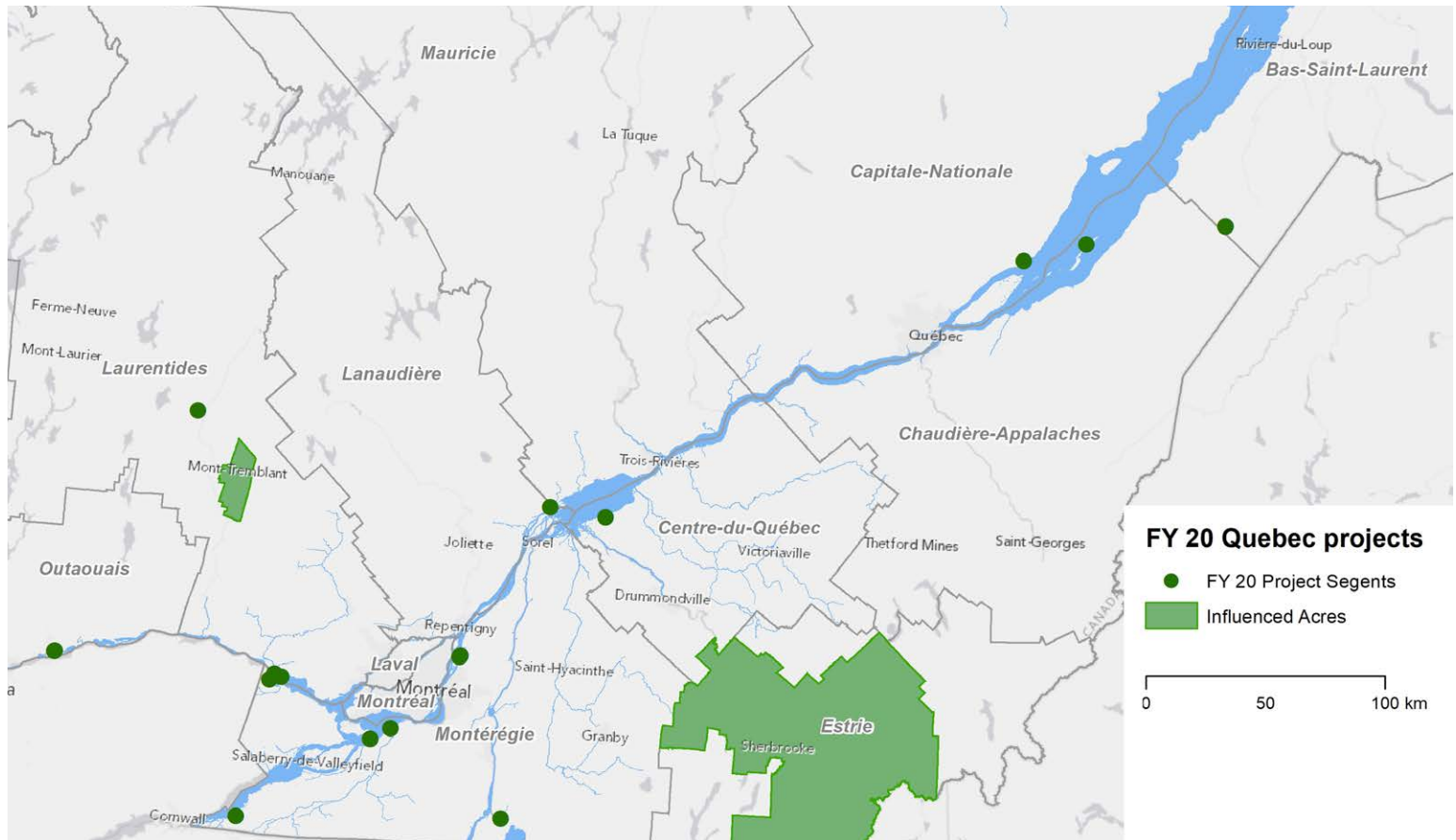


## BAND RECOVERIES

**Right:** Origin of ducks harvested in Virginia from 1921-2016.

**Note:** this datum is not corrected for banding effort.





**Above:** FY2020 DUC waterfowl habitat projects funded in part by Virginia



**DUC is a proud partner of the EHJV.** Canada is home to 25 per cent of the world's wetlands – of which 39 per cent are within EHJV boundaries. The conservation of those wetlands is fundamental to the survival of waterfowl and all migratory bird populations as well as hundreds of other wildlife and plant species.

## FY2020 Accomplishments

Habitat conservation efforts in FY2020 targeted the restoration of wetland complexes for breeding waterfowl and the securement and restoration of key habitats along the St. Lawrence Plain for breeding and staging ducks.

In the FY2020 program year (April 2019 to March 2020), the Virginia DGIF funding was invested in a program mix that cost almost \$4 million. These conservation actions resulted in the direct securement of 826 acres of wetland and upland habitats and the enhancement/restoration of 2,360 wetland and upland acres. DUC completed two mapping projects which resulted in 203,549 acres influenced. DUC also performed ongoing management of our extensive wetland project inventory that now totals more than 49,520 influenced acres (*above*).

# Revenues and Expenditures

This year, Virginia's funding contribution of \$107,900 CAD helped to leverage \$1,514,843 from DU and \$3,343,062 from the USFWS/North American Wetlands Conservation Act when combined with contributions from other states. This amount was matched with \$4,309,710 from other Canadian sources, for a total program expenditure of \$9,987,984. See below for the details of matching partner funding and program accomplishments.

## ***FY20 Accomplishments and Expenditures***

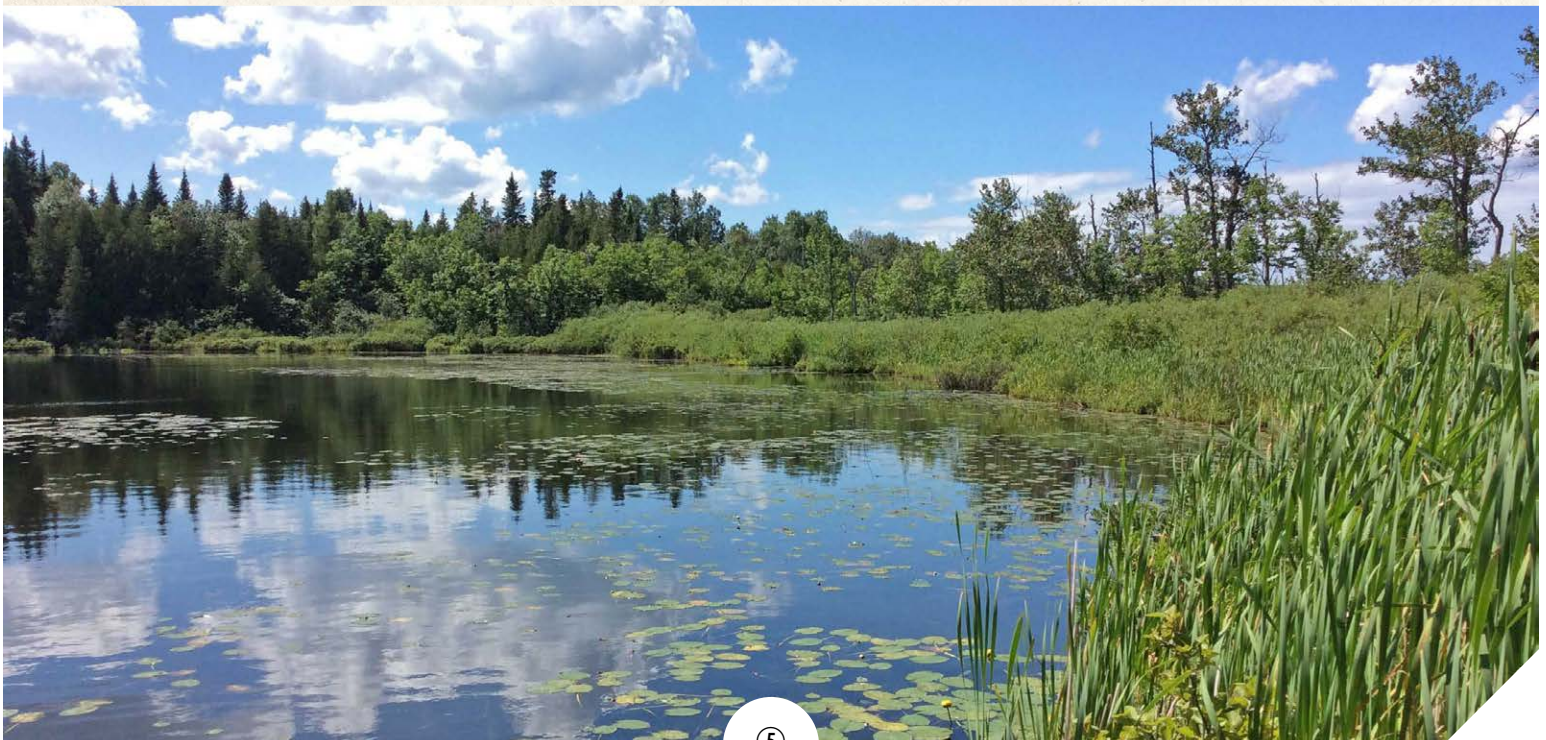
Activity	Acres	Expenditures (\$CAD)
Securement	826	\$1,213,084
Restoration	2,360	\$2,234,444
Management	49,520	\$488,347
Landscape Stewardship	203,549	\$60,000
<b>Total</b>		<b>\$3,995,875</b>

## ***FY20 Revenue Sources***

Revenue Sources	Revenue (\$USD)*	Revenue (\$CAD)
Ducks Unlimited	–	\$375,525
USFWS	–	\$950,261
<b>Virginia DGIF</b>	<b>\$83,000</b>	<b>\$107,900</b>
Other State Contributions**	\$99,500	\$129,350
Various Canadian Contributions	–	\$2,432,839
<b>Total</b>	<b>\$182,500</b>	<b>\$3,995,875</b>

\* An average exchange rate was applied

\*\* New Jersey, New Hampshire, Pennsylvania, Georgia, Maryland, Connecticut, Vermont, West Virginia



# FY20 Project Highlights

The funding provided by the Virginia DGIF was invested in on-the-ground wetland restoration and securement projects that benefit Quebec's major breeding waterfowl species. DUC employs an adaptive approach in the management of our existing habitat project inventory, with a goal of maintaining their ecological function for waterfowl populations. Project upgrades were completed on several wetland projects that were initially constructed in the mid-1980s in an important wetland complex in southern Quebec, ensuring the continuing availability of quality brood-rearing and staging habitats for many years to come.

## Securement Program

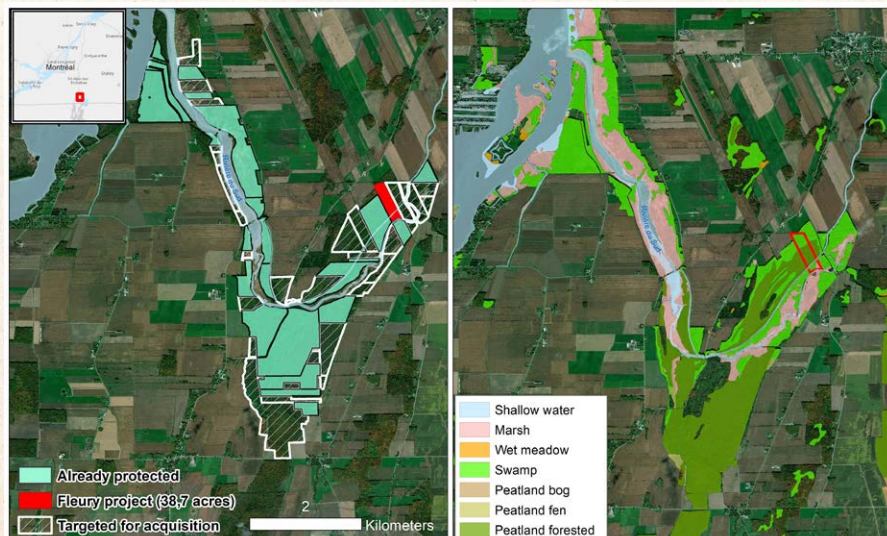
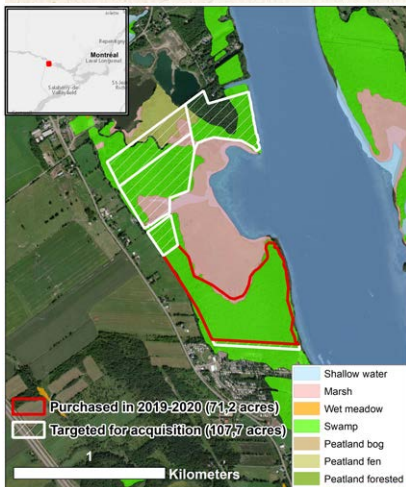
In FY2020, DUC received a significant boost in Canadian federal funding to help acquire wetlands within the EHJV's priority areas. DUC also rallied the Quebec provincial government to help match this program and for the first time in five years, DUC has a significant purchasing program (over \$1 million) in Quebec. Through the strategic use of NAWCA, DU and state grant funding to leverage these Canadian government funds, DUC was able to purchase more than 350 acres of wetland habitat on six projects, and signed offers on more than 200 acres for FY2021. Two of these secured projects are highlighted below.

### Brazeau Purchase

The 71.2-acre Brazeau property (*left*) has been owned by the same family since the 1600s. The property is located 18 miles northwest of Montreal along the south shore of the Ottawa River, near an ecological reserve, a migratory bird sanctuary and an additional property owned by DUC. This project will help DUC consolidate a high-priority area for wetland conservation for the benefit of wood ducks, mallards, black ducks and other waterfowl and wildlife, especially the provincially-listed northern map turtle.

### Fleury Purchase

The South River is one of the main tributaries of the Richelieu River, located in Montérégie, approximately three miles from the Canada-U.S. border. The 38.7-acre Fleury purchase (*below*) continues the acquisition program that started in the early 2000s. DUC is now consolidating this high-priority area for the benefit of waterfowl like green-winged teal, American black ducks and mallards, and other wildlife, including numerous endangered species like the least bittern and yellow rail. This property consisted of 2.5 acres of marsh, 17.4 acres of wooded bog and 18.8 acres of swamp.





## Restoration Program

### Cavity Nest Box Program

DUC staff and partners installed 69 cavity nest boxes, in numerous locations across Quebec this year. New partners were developed and greater than 10-year conservation agreements were signed on more than 474 acres of wetlands and associated acres. Throughout our priority areas in Quebec, DUC has approximately 2,500 cavity-nesting boxes that are maintained by more than 300 volunteers and partners. A website ([www.nichoir.ca](http://www.nichoir.ca)) documents the program and gives collaborators access to collect their annual inventory.

### Lanthier Pasture and Wetland Complex Restoration

The 140-acre Lanthier property (*below*), located on the Ottawa River, was purchased by DUC in 2004. DUC worked with the local agricultural community to develop an agricultural management plan that fenced pasture areas, leased them back to the community and left the wetlands and natural uplands protected against agricultural activities. In the Lanthier region, the natural depressions fill with water in spring, then gradually dry through the summer. To provide better brood-rearing habitat, enhancement work has been carried out to maintain and stabilize water levels in the depressions, optimizing the site for waterfowl. This work will be completed over two years. Phase One was completed in the fall of 2019, with the restoration of 11 acres of wetland while maintaining agricultural activities on the site. Next year DUC will restore an additional seven acres of wetland and enhance the 55-acre pasture to provide access to farmers.



### Lac Sainte-Anne Rebuild

This large wetland (1,581 acres) is located on provincially-owned land in the Bas-St-Laurent area of eastern Quebec. The dam was originally completed in 1984 to conserve the riparian marshes threatened by the deterioration of the original dam constructed in the early 1900s. After providing wildlife habitat and recreational activities like fishing for over 30 years, the water control structure has reached the end of its lifespan and needed to be rebuilt to today's Dam Safety Act standards. Wooden beams were replaced with permanent steel plates (*left*) and the dyke was re-enforced to protect against erosion. This structure will allow for better water level management, and significant funding was provided by our EHJV partner, the Quebec Ministry of Forests, Wildlife and Parks (MFFP).



### Refuge Marguerite-d'Youville Rebuild

Located on St. Bernard Island in the St. Lawrence River, this 515-acre property was purchased by DUC and transferred to the MFFP with a restrictive servitude on the title (Conservation Easement) 20 years ago. Recently, water control structures on site reached their life expectancy and needed to be replaced. In partnership with MFFP, DUC replaced the structures and re-cored almost 600 feet of dykes to increase their stability. Anti-beaver technology was installed with caging and a maintenance/visitor walkway was installed at the structure. The wetland restored was almost 300 acres, and the provincial government funded 75 per cent of the project and will assume long-term maintenance of water levels and structures. The refuge, located 14 miles south of Montreal, is a popular site to visit for educational and recreational purposes with approximately 30,000 people visiting each year. DUC and the refuge manager are working on signage to highlight the importance of this site to waterfowl like American black ducks, wigeon, gadwall, ring-necked ducks, teal and wood ducks, and other wildlife.



**Above:** Repair of the pumping station pipe at Ile Dupas Marsh. **Below:** Repair of slumped and eroded dyke at St. Louis Marsh.

### Management Program

#### Protecting Our Investment

With more than 436 wetland conservation project segments in the province, representing 49,520 acres of secured habitat, ongoing operation and maintenance is critical to ensuring the projects continue to provide valuable waterfowl habitat. DUC's engineering team uses a group of enthusiastic, hard-working contractors and summer students to ensure projects are in good working order. Removing beaver debris, managing water levels and assessing project infrastructure conditions are all important components of the annual management program.





## Influencing Landscapes

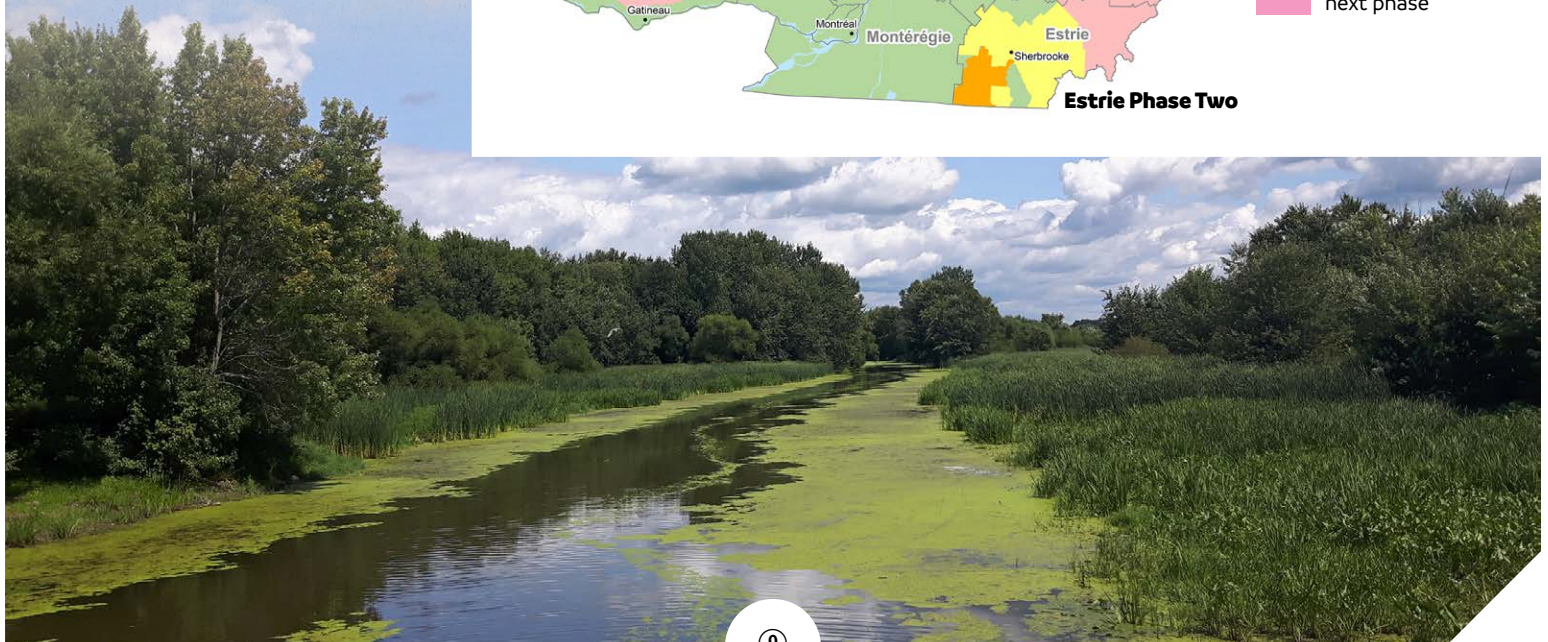
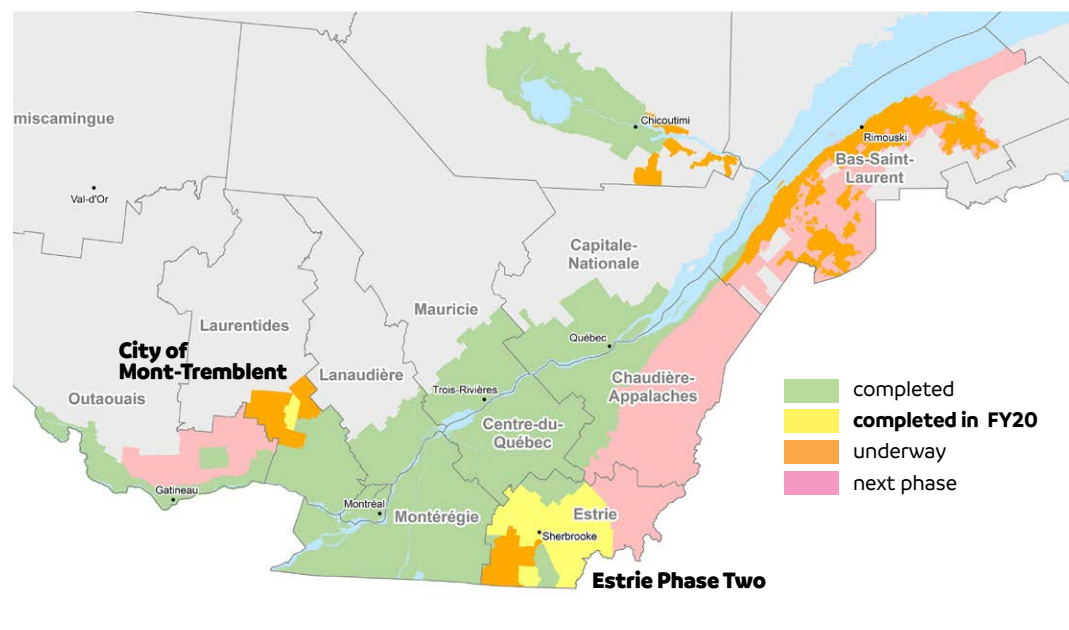
### Municipal Stewardship Program

Integration of the baseline information about the extent, type and state of wetlands into various planning, conservation and public awareness activities by municipalities, governments, watershed groups and other NGOs is the goal of the Municipal Stewardship Program. Since 2010, over 1,621,000 acres of wetlands have been mapped in the Saint Lawrence Lowlands, which includes Montreal and Quebec City, and covers 72 regional municipal counties, 766 municipalities and has a population base of over six million. In FY2020, DUC completed two mapping projects: the city of Mont-Tremblant and Phase Two in the Eastern Townships.

- ✚ For the City of Mont-Tremblant, 1,560 wetland polygons were identified covering an area of 4,714 acres, which corresponds to eight per cent of the territory in wetlands.
- ✚ Estrie Phase Two resulted in 40,725 wetland polygons covering an area of 198,835 acres, which corresponds to 15 per cent of the territory in wetlands.

Due to this success, the program will continue to develop mapping tools for municipal land-use planners in partnership with many other government and municipal partners for the settled areas of southern Quebec (*see pink areas on progress map below*) over the next five years. These activities will provide quality information on the presence and value of wetlands to these municipalities and provide the basis for long-term conservation planning.

**Below:** A property on the South River previously purchased by DUC.





Ducks Unlimited and the Virginia DGIF are working together to conserve the 'best of the best' waterfowl habitats in Quebec.

# Securing a Legacy

***Ducks Unlimited is the world leader in wetland conservation.***

The EHJV Implementation Plan and DU have set habitat objectives to restore key priority areas in Quebec and to sustain waterfowl production. Continued partnerships will be the key to success.

DU values its relationship with the Virginia DGIF and recognizes them as a key player in supporting NAWMP conservation efforts in Canada. However, increased support from all partners is needed if the goals of NAWMP are to be met. The waterfowl community continues to recognize habitat programs as the primary solution to waterfowl recovery. DUC is the primary delivery agent of the NAWMP program in Eastern Canada.

***Your support and continued action in Quebec means that critical waterfowl habitat will be protected in the top waterfowl production area of North America. The benefits of these conservation efforts will endure for the enjoyment of future generations.***

## Thank You.

